Chapter IX

Basketry and Its Techniques

1. General Considerations

Basketry is far from being as abundantly represented among the Chiriguano and the Chané as among the Indian tribes of the Amazon basin or the Guianas. The secondary role it plays in their industry is due to the nature of the soil where they live and the climate they enjoy. Palm trees with pinnate leaves are lacking, to my knowledge at least, over the whole extent of their territory; as for the ones whose leaves open like fans, if they are numerous in certain places, their occurrence is far from being uniform. The palms which the Chiriguano Indians call karandaí (Copernicia australis) form veritable groves here and there, whereas over vast regions they are lacking or appear only sparsely. I saw a considerable number of them between San Luis and the Saladito River, and I have crossed some large palm groves between Yacuiba and Villamontes, on the Pilcomayo, and south of the Parapití River, going from Cuevo to Pipi. I noted, moreover, that the distribution of the karandaí coincided with that of a certain type of basketry (twilled work /named in English/), for which the Indians use these leaves.

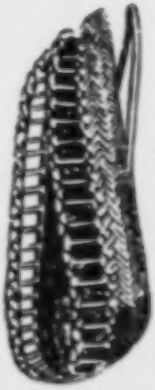

Fig. 97. Back basket used by the Guarayú Indians for transporting heavy loads (from Nordenskiöld).

Nordenskiöld (10, p. 169) recounts an anecdote which illustrates well the influence the environment exerts on this industry. At the time of one of his trips into the Chaco, the scholar was accompanied by several Guarayú Indians, who followed him as far as Chiriguano country. The Guarayú customarily load their baggage and the products of their fields into back baskets of a special type (see Fig. 97) which have a wide distribution in tropical America, from the Guianas to Paraguay (Nordenskiöld 11, p. 171 and Map 21).

Gu 285 482 [824] /439 cont./ p. 171 and Map 21). Their baskets being in bad shape, the Guarayú wanted to make some new ones and were very annoyed not to find in the region into which they had come the palm trees with pinnate leaves which they were in the habit of using for this purpose. Now, Guarayú and Chiriguano are brothers in race and language and emigrated at the same period from Paraguay to settle in the vicinity of the Andes. When leaving their country of origin, both were acquainted with this type of basket used by their ancestors, the Guarani, the Tupinamba of the Brazilian coast, /440/ and still favored among their first cousins from Paraguay, the Kainguá (Métraux, 2, p. 206). The disappearance of this cultural element among the Chiriguano is due solely to the lack of appropriate raw materials.

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C 177 482 In order to make up for the absence of back baskets, indispensable to a farming people /Fig. 98 appears here/ the Chiriguano borrowed from their neighbors in the Chaco, either the Mataco or the Choroti, the carrying nets (in Chiriguano: añapoka) whose use is so widespread among the latter and is so characteristic of their civilization. Carrying nets today are in general use among the Chiriguano, and in every village each family has at /Fig. 99 appears here/ least one (Figs. 98 and 99). In spite of this wide diffusion, the Chiriguano añapoka betrays its origin by its form and technique (see Figs. 100 and 101 /see pp. 283 - 285/), which are both found in the tribes we have just enumerated (Nordenskiöld, 9, p. 208, Technique I). Although considerably more advanced on the way to civilization than the seminomadic tribes of the Chaco, the Chiriguano do not by any means equal them /441/ in the art of making nets. The añapoka I collected cannot be compared with the deep bags which the Mataco or the Choroti, for example, make for the same purpose. In the village of Machareti, where Toba live with Chiriguano, it is the former who furnish the latter with the /Fig. 100 appears here/ carrying nets they need (see Fig. 99 /see p. 282/) (1).

C [171] C [286] C [543] [439]

C 286 482 171 1. Nordenskiöld (10, p. 163, Fig. 49 A) gives the detail of the technique of a Chiriguano carrying net. This technique is not found on any

[Text continues on p. 283]

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194 197 284 482 [439] Everything thus leaves us to suppose that, in the early period of their settling on the western confines of the Bolivian Chaco, the Chiriguano procured by barter the carrying nets intended to replace the back baskets they had used until then. It was only later that they learned to make them themselves, adopting only the simplest and easiest of techniques besides. Thanks to this example we can catch alive the causes which have motivated the adoption of a new cultural element after the disappearance of another which rendered the same services. For that, two factors have come into play, the physical environment and the ethnic one. There was adaptation and borrowing at the same time. This fact also proves that a relatively civilized people never hesitates to appropriate the inventions of more barbaric tribes when they find some advantage in it.

●285 19 The present poverty of the basketwork industry among the Chiriguano does not imply that it is insignificant and worthless. Perhaps before the decline of this nation it was more widely represented in each village. I was able to observe that the disappearance of basketwork /442/ went along with the influence of the white men. But, for the reasons I have given above, I do not believe that at any time there could have been found among the Chiriguano that abundance of objects made of basketwork which travelers noted among the Indians of Guiana or the Amazon basin. Formerly, when the ancestors of the Chiriguano were still living in Paraguay and Brazil, they possessed basketwork identical with that of the tribes inhabiting the regions I have alluded to. Proof of it is furnished by the survival among the modern Chiriguano of various types of baskets, fire fans, and sieves, of which we find /Fig. 101 appears here/ the exact equivalent only in Guiana and the Amazon basin. As we shall ascertain in the course of this study, the identity between these two ethnic areas is perfect from this point of view. The only difficulty is to know whether in this case it is a matter of the remains of an industry peculiar to the Chané Indians of Arawak origin, whose influence upon the Chiriguano was considerable, or whether this basketwork only continues that of the ancient Guarani emigrants. In my opinion CCC the question does not need to be asked. The basketwork of the

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/442 cont./ The basketwork of the ancient Guarani or Tupinamba did not differ essentially in technique, form, or processes of ornamentation from the basketwork of the north of southern America (Métraux, 2, pp. 249-255). It must have offered more than one point of similarity with that of the Chané, and we must consider the modern basketwork of the Chiriguano the heir of the basketwork common to these two /443/ nations. Let us notice in passing that the basketwork of the populations of tropical America has a certain unity. Nevertheless,

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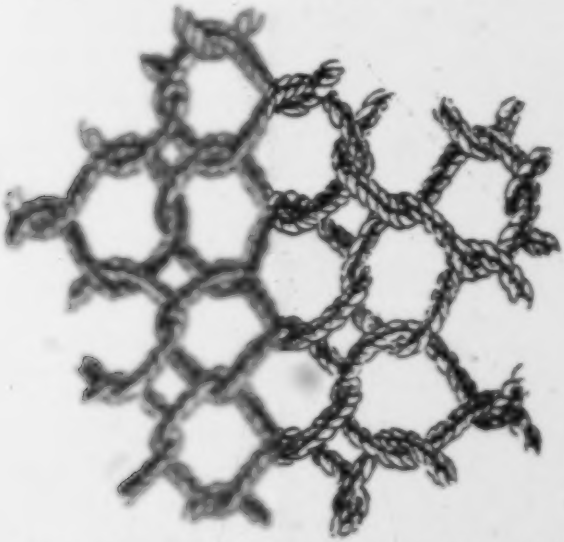

Fig. 101. Technique of the net of Fig. 99 (Technique V, according to Nordenskiöld, 9, p. 208).

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it was in the Guianas that it reached perfection.

After their great migration to the foot of the Andes, the Chiriguano seem to have adopted basketwork of a new technique, which doubtless was unknown to their ancestors and racial brothers in Paraguay and Brazil. This technique is characteristic of all the objects I am putting under the heading of wicker work /noticed in English/ in the following pages. As we shall see, this technique also exists in the Guianas, and it is possible that it was brought into the Bolivian Chaco by the Arawak nation of the Chané. The center of dispersion of the Arawak must be

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Ce 101 194 /443 cont./ the center of dispersion of the Arawak must be placed to the north of the Amazon, and before the Chiriguano invasion the Arawak tribe of the Chané was established over the whole extent of the territory now occupied by the former.

C 285 171 Beside this technique another exists, known to the Chiriguano since time immemorial and well before their great migration. The English-language ethnographers give it the name of twilled work. No other type of basketwork is so widespread. This technique is preponderant in all of tropical America from the Antilles to Paraguay and in the south stops at the Chaco. The Chiriguano are the only Indians of the Chaco among whom twilled work is in current use. This type of basketry used to exist on the coast of ancient Peru, but its importance there was not great and it appears only in work baskets.

C 285 184 Basketry in wicker work and that in twined work do not have an identical distribution among the Chiriguano. Baskets of the first kind are numerous in the villages of the upper Pilcomayo (Saladito, Salado Grande and Chico, Ibopeytí, and Yumbia) and go as far as the Ivu mission. They stop, or are rare, in the rest of the Chiriguano country, notably in the Caipipendí valley, where baskets of the second type (twilled work) predominate almost exclusively. These are widespread there, and the beauty of their workmanship, the embellishments with which they are provided, put them well above the basketwork of any other none and even above that of tribes living in regions richer in palm trees.

C [126] In the huts of the upper Pilcomayo I collected several baskets in twilled work, but they were rare there and often incomplete and torn. I had the impression that they had arrived there by way of commercial exchanges. In any case, the Indians no longer plait baskets of this type, and it is possible that their disappearance has given value to the specimens of them which remain. That would explain the absence of any new specimen and the preservation of ancient baskets almost beyond usefulness. Be that as it may, at present the true center of basketry in twilled work is the Caipipendí valley, and that of the basketry of /444/ wicker work, the region of the upper Pilcomayo. Since the living conditions of the

C [178] Chiriguano in the missions north and south of the Pilcomayo have undergone deep modifications, I do not know what the respective

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285 distribution of these two techniques must have been in former times.
184 We shall find this difficulty every time we consider the diffusion of a cultural element peculiar to these Indians.

285 Wicker work basketry has undergone strong European influence.
199 The agents have been the half-breeds of the department of Tarija, who live in constant contact with the Chiriguano. This foreign influence on the baskets belonging to this technique is manifested by modifications of the original forms and improvements of details, such as horseshoe handles.

285 Among the Chiriguano I did not find a single basket woven
191 with the technique called "in spirals" (coiled basketry /named in English/), although in olden times it was in use among the Andean populations who used to and still do live in contact with the Chiriguano. Basketwork "in spirals" has continued on the altiplano, as the basket of Fig. 103, which I bought in La Quiaca, proves.

Basketry in "Wicker Work"

285 Mason (p. 228) designates under the name of wicker basketry a type obtained with the following technique: a rigid framework composed of thick, solid elements is intercrossed by thinner, more flexible elements. In the course of this work I shall call warp the rigid elements of the framework, and the ones crossing them, woof. The woof passes alternately over and under each element of the warp. This technique is well known to us: it is that of our wicker baskets, trunks, and back baskets (see Fig. 105 /see p.295 /).

Because of its very simplicity we have a right to suppose that this technique is old. It is only a variety of checker work /named in English/, the most elementary of all the techniques. By checker work we understand the process which consists of interlacing flexible bands so as to obtain a checkerboard design. The only piece of basketry made with this technique that I know of in the region we are concerned with is a basket that Eric von Rosen

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285 (1. Fig. 134, p. 172) obtained from some Chiriguanos who were [114] camping near Tatarenda. I share the opinion of this explorer, who considers this object as of Chiriguano origin.

In spite of its simple and archaic character, basketry in [171] wicker work is rare in South America. According to Nordenskiöld (10, p. 171, and 13, p. 198), it is found among the Araucan, Tucuna, Atsawaka, Tambopata Guarayú (Chama), Tomiata, and the Indians of Guiana, in particular those of the Roraima region.

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Map 1. showing the distribution of the technique called wicker work

1s Métraux--290 E-5 (1929) 1930 SF10 Chiriguano SF10

Table for Map 1

Distribution of the basketry technique called "wicker work"

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Numbers on the map	Tribes	Authors	Remarks
1	Chiriguano and Chané		
2	Diaguite	Museo de Tucumán No. 306	Some impressions on the base of a vessel enabled me to discover the existence of this technique in this geographical area.
3	Araucan of Chile	Latcham, p. XXXV (1)	
4	Araucan of Argentina	National Museum of Buenos Aires (Palavecino Collection).	
5	Yuracare	Nordenskiöld, 11, Fig. 30, p. 128.	
6	Atoawaka, Tambopata-Guarayú	Nordenskiöld, 11, p. 198.	
7	Palikur	Nimuendajú, Fig. 23, p. 49.	
8	Siuñ and Kauá of the Alary River	Koch-Grünberg, 2. Vol. II, Fig. 142 a-d, p. 221.	
9	Patamona, Makuni, Arekuna	Roth, p. 140, Pl. 105 B and C.	
10	Arawak	Roth, Pl. 104 B.	

[113]

1. Latcham, R. E., "Ethnology of the Araucanos," in The Journal of the Royal Anthropological Institute of Great Britain and Ireland, Vol. 34, London, 1904, cited from Nordenskiöld, 10, p. 171.

/446 cont./

285 171 This information needs to be completed. The technique called wicker work was apparently known to the ancient Diaguite. A vessel from one of the Andean valleys in Tucuman province bears imprinted on its base impressions left by a tray or basket in wicker work, upon which the potter had placed this receptacle when the clay was still soft (Fig. 102). This discovery did not surprise me: already, and for a long time, I had supposed that this manner of plaiting baskets was not foreign to the peoples of the Andes. How otherwise could one explain the occurrence of wicker work among the half-breeds and Indians of Tarija department, the Araucan and Chiriguano Indians of the upper Pilcomayo?

Guiana forms a second area of dispersion of this technique without, however, its being very common there. The small bags in which the Patamona put the cotton with which they provide the arrows of their /447/ blowguns before blowing them are in wicker work, the same as the pegalls with the so-called "armadillo" motifs of the Arawak, Patamona, and Makuši /Macusi/. The baskets in the form of carafes or bottles of the Siusí /Siusi/ and Kauá /Caua/ of the Aiary River are also good examples of this technique. (On the modalities and distribution of this technique, see Roth, p. 140 and Plates 104, 105, and 106, and pp. 329-331.)

The distribution of this technique is wider in North America. It is known to the Indians of eastern Canada and abounds in /Fig. 102 appears here/ southern Mexico and in Central America. It appears scattered here and there on the Pacific Coast and in the interior basin.

Most of the fish weirs, the enclosures for stopping game during hunting drives, and the coarse baskets serving for the transport of numerous objects are made in this technique.

285 323 If one examines the baskets of this type among the Chiriguano, one will doubtless be struck by the fact that several of them assume the form of pottery pieces. This resemblance is further accentuated by the fact that some (see Plate LXXV, 2 /see p. 299/) are provided with lateral handles in imitation of vessels. The interplay between these two industries is evident.

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285 191 192 The horseshoe handles which surmount some of these baskets /Plate LXXV, 1 and 3/ seem to me to come from imitation of European or half-breed basketwork. Among the half-breeds of the eastern slopes of the Andes I found baskets which had exact replicas among the Chiriguano (see, for example, Fig. 108 /see p. 302 /) and attested eloquently to the borrowing of the latter.

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Fig. 102. Base of a vessel from the mountainous region of Tucumán Province, and bearing the impressions of a tray or basket in wicker work, on which it rested during its manufacture.

Besides, the Chiriguano give the Spanish name of canastos to baskets of European form /Fig. 103 appears here./

Among the baskets in wicker work there are some (Plate LXXV 4) which in form and technique are singularly reminiscent of the baskets of Brazilian Guiana which Koch-Grünberg (2. Vol. II p. 221, Fig. 242 a, b, c) compares to carafes. (Cf. also Roth Plate 104, Fig. C.)

2A [See p. 299--Analyst]

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Description of baskets in "wicker work"

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Figure 104. Length, 20 centimeters; width, 14 centimeters; height, 14.5 centimeters. Provenance: Ibopeyti (upper Pilcomayo region).

This little basket was made by the technique called wicker work, that is, the woody stems constituting it were intermingled in such a way that the elements of the woof pass alternately above and below those of the warp. There are ten of the latter: four go in the transverse direction and six in the longitudinal. They are crossed over and held by the stalks of the woof. Plate LXXIII gives a very exact idea of the technique I have just tried to define.

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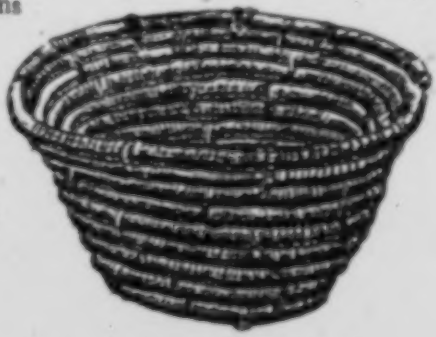

Fig. 103. Small basket in spiral basketry (coiled basketry). Bought at La Quiaca. (2/3 nat. size.)

The fibrous stalks which constituted the warp and went far beyong the rim of the basket were bent back in an arc and fastened into the fabric. They were slipped into it beside another element of the warp after /449/ crossing the neighboring element (see Fig. 105 /see p.295 /). Because of this, the little sides of the basket seen in Figs. 104 and 105 seem to be formed by a warp of which each element is double. The rim is regular and strong.

The basket is provided with a suspension cord of vegetable fibers. I do not know the scientific or common name of the plant from which the stalks used in the plaiting of this basket were taken. They are flat, regular, and rectangular in cross-section.

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285 Nordenskiöld (10, Fig. 53 B) published a basket of analogous shape and identical technique.

Plate LXXIV, Figure 1. $\frac{2}{3}$ Height, 16 centimeters; maximum diameter, 14 centimeters. Provenance: Saladito (upper Pilcomayo).

The warp is composed of 12 elements crossing one another at the base in the shape of a quadrilateral, that is, in groups of three (see Plate LXXVI, 1 /see p.300 /). The woof, like the warp,

Fig. 104. Basket in wicker work with cover. Prov.: Ibopeyti. (1/3.5 nat. size.)

is made of fibrous, flat, thin strips. The ends of the warp which passed beyond the rim have been folded back and slipped into the fabric.

Plate LXXIV, Figure 2. Height, 16 centimeters; maximum diameter, 18 centimeters. Provenance: Ivu.

The technique of this basket is identical with that of the preceding specimen. Only the raw material is different. The rigellas composing it are very thin and lend themselves less well to regularity of the /450/ fabric. For this reason the elements of

A n [See P. 298-- Analyst]

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●285 the warp are double. It is composed of 32 tigellas arranged in pairs, which, in reality, gives 16 elements. They cross at the base, forming an octagon somewhat like Plate LXXVI, 2.

Plate LXXIV, Figure 3. Height, 13.5 centimeters; diameter, 11 centimeters. Provenance: Ivu.

The framework of this basket is made of uneven, coarse stalks. The base is composed of fine, close-woven tigellas. Some stalks of the warp have been split, then spread to form two distinct

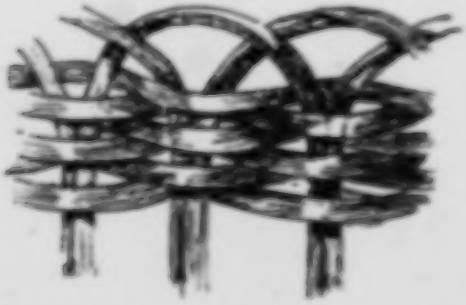

Fig. 105. Detail of the technique of the rim of the basket of Figure 104.

elements (see Fig. 106 /see p.301 /).

Plate LXXIV, Figure 4. Height, 13.5 centimeters; diameter, 11 centimeters. Provenance: Tintapaw (Alto Pilcomayo).

This basket is identical with the one we have just described, except that the rough and brittle stalks make a thick, coarse fabric.

Plate LXXV, Figure 1.$\frac{1}{4}$ Height, 19 centimeters; diameter, 18 centimeters. Provenance: Timboy (region of the Saladito River).

This basket differs from the preceding ones only by the shape of the horseshoe handle surmounting it. This is composed of twisted fibers exactly as in our household baskets. There are 12 warp elements, arranged in groups of three, radiating from the base and forming a quadrangular figure as in Plate LXXVI. 1.$\frac{2}{4}$ Some stalks of the woof have been dyed pink.

$\frac{1}{4}$ [See P. 299 -- Analysis]
$\frac{2}{4}$ [See P. 300 -- Analysis]

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285 Plate LXXV, Figure 2. Height, 16 centimeters; maximum diameter, 17.5 centimeters. Provenance: Ibopeyti (upper Pilcomayo).

This basket deserves a place apart by virtue of its general shape, the handles it has, and the care with which it was plaited.

The handles with which it is provided are formed by an element of the woof which, after making the round of the warp, takes off from it to pass three times, perpendicularly, under the framework of the basket. /Plates LXXIII-LXXVI appear here./

/451/ The handle thus obtained is reinforced by a supplementary tigella which laces among the elements just as the woof does (see Fig. 107 /see p.301 /). Plate /Fig. 106 appears here/ LXXVI, 2, shows us the fashion in which the basket-maker proceeded in order to group the warp elements, which are 15 in number.

Plate LXXV, Figure 3. /Fig. 107 appears here./ Height, 16 centimeters; maximum diameter, 15 centimeters. Provenance: Ñawirenda (mouth of the Salado River).

The framework is composed of flat, brittle stalks always going in groups of two. The added handle is made of twisted fibers. [177] The general form of this basket betrays European influence.

Plate LXXV, Figure 4. Height, 15 centimeters; diameter, 12 centimeters. Provenance: Ñawirenda (mouth of the Salado River).

The warp is formed of flat, thin elements wider than those of the woof. The handles /452/ are added on. They are formed by a stalk coiled on itself and passing three times under the woof elements. One stalk interlaces there exactly as the woof interlaces with the warp. /Fig. 108 appears here./

Plate LXXVII, Figure 1. Height, 8 centimeters; diameter, 16 centimeters. Provenance: Ibopeyti (upper Pilcomayo). /Fig. 109 appears here./

This little, slightly rounded basket is remarkable for its rigidity and strength. The technique is still the same as we have examined thus far. The warp is composed of 15 elements arranged at the base exactly as on Plate LXXVI, 1.

Plate LXXVII, Figure 2. Height, 9 centimeters; width, 11 centimeters. Provenance: Tintapaw (mouth of the Salado River, upper Pilcomayo).

[See p. 304--Analyst]

1: Métraux--297 E-5 (1929) 1930 SF10 Chiriguano SF10

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Plate LXXIII

Base of the basket of Fig. 104, indicating the detail of its technique.

I: Métraux--298 E-5 (1929) 1930 SF10 Chiriguano SF10

Plate LXXIV

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Chiriguano baskets in wicker work. Prov.: 1. Saladito (upper Pilcomayo); 2 and 3. Ivu; 4. Tintapaw (upper Pilcomayo). (About 1/2 nat. size.)

1: Métraux--299 E-5 (1929) 1930 SF:0 Chiriguano SF

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Plate LXXV

Chiriguano baskets. Prov.: 1. Timboy (upper Pilcomayo); 2. Ibopeyti; 3. Nacunda (upper Pilcomayo). (About 1/2 nat. size.)

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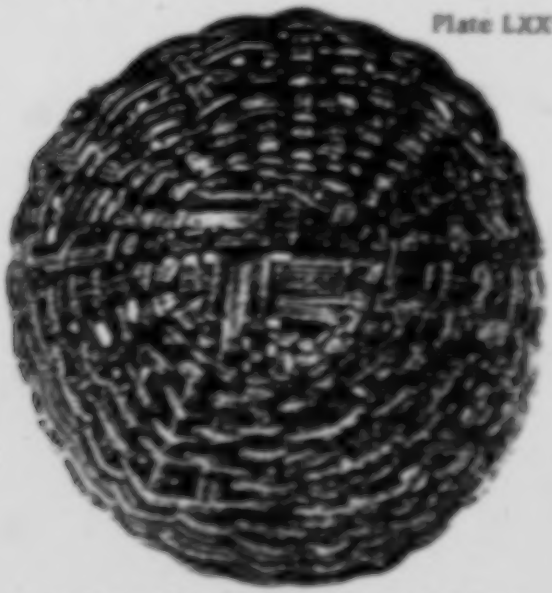

1. Base of the basket of Plate LXXIV, 1.

2. Base of the basket of Plate LXXV, 2.

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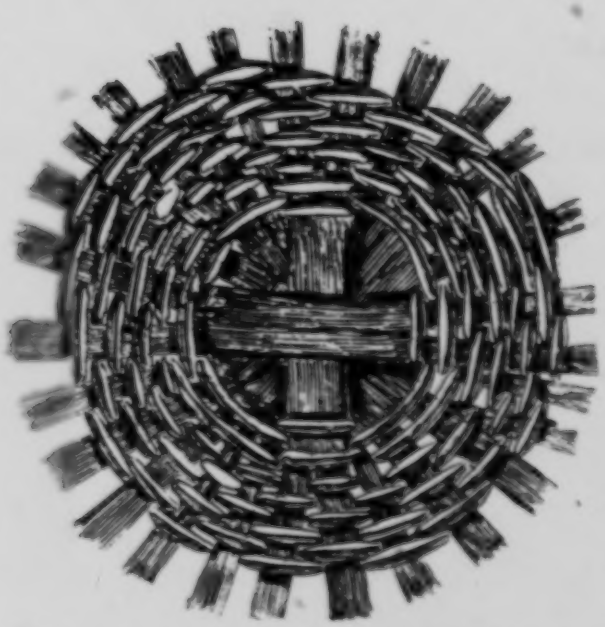

Fig. 106. Detail of the technique of the bottom of of the basket of Plate LXXIV, 3.

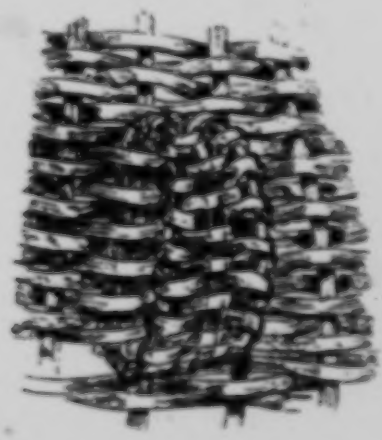

Fig. 107. Detail of the handle of the basket of Plate LXXV, ?.

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Fig. 108. Basket in wicker work in imitation of those of the half-breeds. Prov.: Ivu. (About 1/4 nat. size.)

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Fig. 109. Miniature basket (child's toy). (Nat. size.)

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285 This small basket is closely related to the preceding one in its technique. The warp is made of four fibrous bands which cross in octagons and are then divided into three /Plate LXXVII appears here/ /453/ or two diverging elements which form the warp (see Fig. 106 /see p. 301/).

Figure 108. Height, 12 centimeters; maximum diameter, 28 centimeters. Provenance: Ivu.

[199] There is no doubt that this basket is a pure and simple imitation of European ones. I have seen baskets identical from the point of view of form and technique among the half-breeds of the department of Tarija.

3. Basketry in "Twilled Work"

The term twilled work designates the basketry technique in which the woof elements pass over two or several elements of the warp so as to produce with the contexture of the fabric diagonal motifs and an infinity of others all based on the changes of rhythm in the number of the warp elements which have been skipped over (Mason, p. 224).

285 191 In the pages where I dealt with wicker work I have already had occasion to note the affinities which not only the technique but even the form of Chiriguano baskets offer with those from Guiana. The analogy is still more striking with twilled baskets. We have among the Chiriguano the exact counterpart of the famous telescope baskets or pegall of Guiana. These are rectangular baskets in two parts, one fitting into the other and shutting hermetically (Plates LXXVII, LXXX, 2, and Figs. 110 and 111). Nordenskiöld (10, p. 172) has given us a map indicating the distribution of baskets provided with a cover into which they fit more or less completely. These "telescope" baskets are particularly abundant north of the Amazon. I suspect that the famous karamono of the Tupinambá, in which the latter put their feathers, must have belonged to this type. Among the Tupi-Guarani, the only ones where this type of closure has been noted are the Guayakí, Parecuna, Mashí /Mayí/, and Oyampi (Métraux, 2, p. 253).

[See pp. 309 & 309 respectively -- Analyst]

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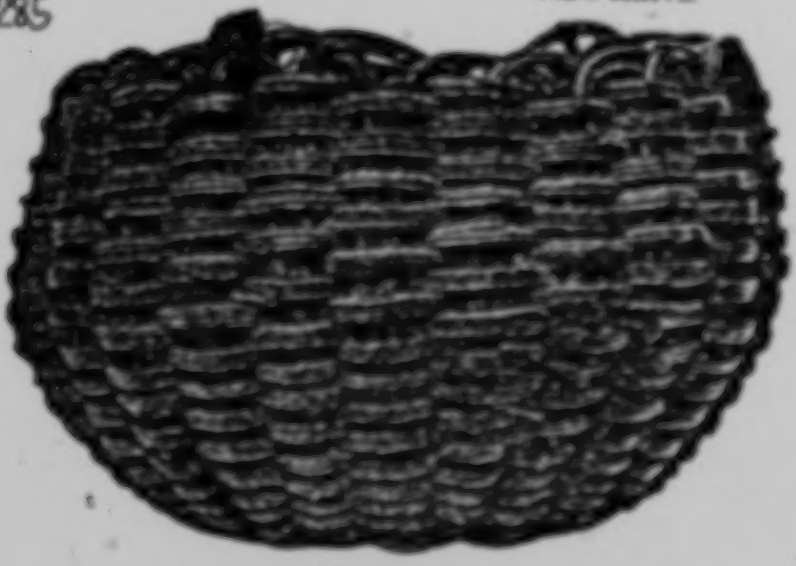

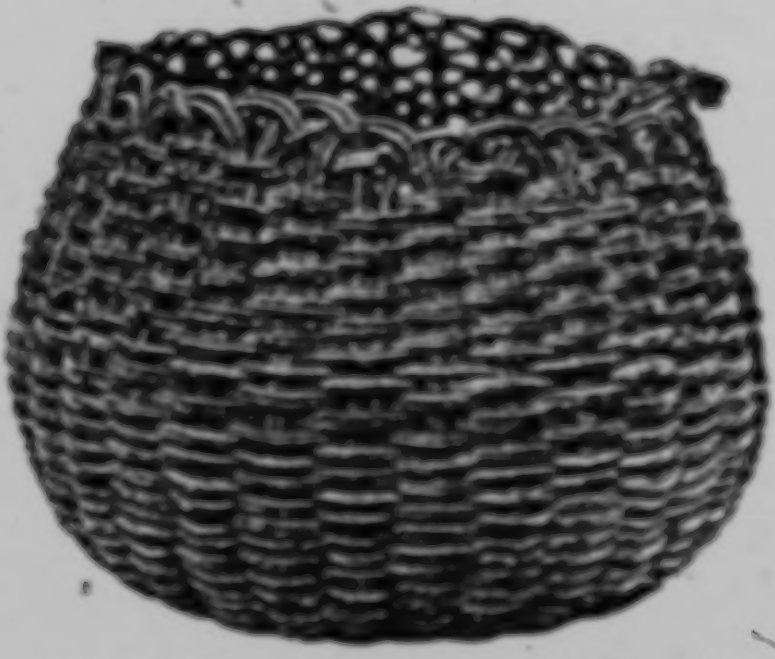

Chirigoano baskets in wicker work. From: 1. Зверухт (upper Pikomayé); 2. Тапарам (upper Pikomayé). (1/5 nat. size.)

1: Métraux--205 E-5 (1959) 1930 SP10 Chiriguano SP10

/450 cont./

285 (531) (191)

Another point of contact between the basketry of the Chiriguano and that of the Indians of the east and north of South America is the occurrence of baskets in twilled work in which elements of two colors are combined, following a changing rhythm, to produce geometric figures. The basket of Plate LXXVIII, with the frets standing out in black on the side, is representative of this form of art, which, in the Guianas, shows with a lively brilliance.

Baskets of the pegall or "telescope" type are divided into two categories according to the principle of their plaiting. To make one kind (Plate LXXIX and Fig. 111), the basket-maker began by crossing the warp elements with one another in such a way that they radiate from a single center. Then he interlaced according to a binary rhythm the rigellas which /454/ left the common center like so many rays. Baskets of the second category have been plaited by intermingling the elements of the warp and weft at right angles so as to make the bottom without any precise point from which the elements come away (Plate LXXX, 1). The photographs (Plate LXXIX and LXXX, 1) show what I mean better than any description.

514 The stalks which serve for the fabrication of baskets in twilled work are taken from the leaves of the serendé palm Copernicia cerifera Mart. or Copernicia australis. The leaves are cut into five strips and softened by immersion.

Sieves and fire fans belong in the basketry called twilled, but I shall deal with them in a separate chapter.

Description of baskets in "twilled work"

Plate LXXVIII, Figures 1 and 2. Height, 7 centimeters; diameter, 17.5 centimeters. Provenance Caipipendi.

This basket belongs to the category of those called "telescopes" or /Fig. 110 appear here/ pegall of Guiana. Plate LXXIX which shows the detail of its upper surface also indicates its technique with sufficient clarity so that no diagram is necessary. The warp is composed of 32 flexible elements radiating from a common center. They begin by interlacing for two rounds then,

A [see P 304 -- Analysis]

/old page/

285 the basket-maker having introduced black-colored strips into the fabric, these in turn go to cross /Plates LXXVIII-LXXX appear here/ /also/ the first and permit obtaining the figures seen in Plate LXXVIII, 1 and 2.

Figure 110. Height, 14 centimeters; diameter, 35 centimeters. Provenance: Caipipendi. /Fig. 111 appears here./

This large basket is exactly like the preceding one from a technical and decorative point of view. Unfortunately, the dark strips are scarcely distinguishable from the others, whether their color has been rubbed off or whether they have always been thus. The detail of one of the sides is represented on Plate LXXXI, 1. /Fig. 112 appears here./

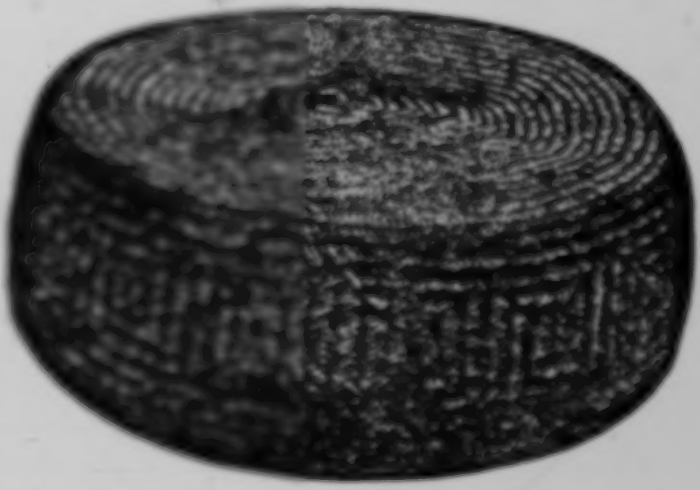

Fig. 110. Circular basket in twilled work. Prov.: Caipipendi. (About 1/8.5 nat. size.)

Figure 111. Height, 9 centimeters; width, 12 centimeters. Provenance: Caipipendi.

This basket goes in the same category as those we have just examined, except that it does not show any motif originating from an interlacing of dark and light stalks.

1: Métraux--207 E-5 (1929) 1930 SP10 Chiriguano SP10

Plate LXXVIII

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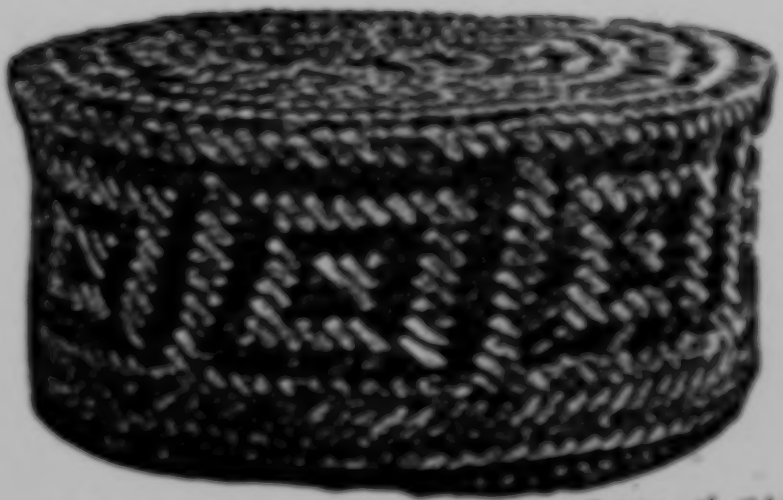

Chiriguano basket in open-work. From Caipipendi. (1/3 nat. size.)

1: Métraux--208 E-5 (1929) 1930 SP10 Chiriguano SP10

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Bottom of the basket of Plate LXXVII.

1. Basket of the talascape type in twilled work.
Prov.: Caiçipondé.

2. Details of the weaving of the basket.

Ir Mémoire--210 E-5 (1970) 1980 SP10 Chirigoano SP10

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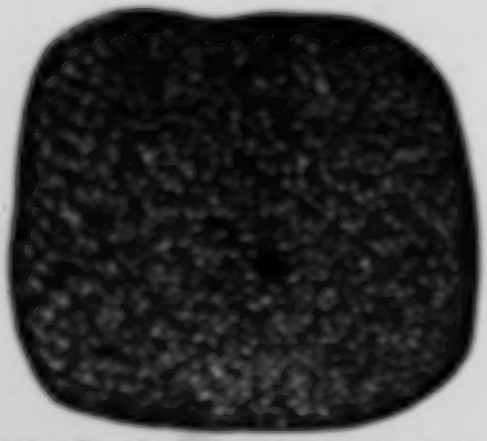

Fig. 111. Circular hairnet of the "telescope" type in twilled web. Prov.: Calgoncal. (About 1/2 nat. size.)

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Fig. 117. Hat in twilled web. Prov.: Carcaral. (About 1/3 nat. size.)

/456/

• 285 Plate LXXX, Figures 1 and 2. Height, 8 centimeters; width, 12 centimeters. Provenance: Caruruti.

The fine strips of palm leaves which make up this basket are wider and more brittle than the ones constituting the preceding one of identical shape but different technique. The fibers, instead of radiating from a single center, simply cross, following the rhythm which Figure 2 of the same plate permits examining.

Fig. 113. Hat of the type of Figure 112 in the process of being made. (About 1/6 nat. size.)

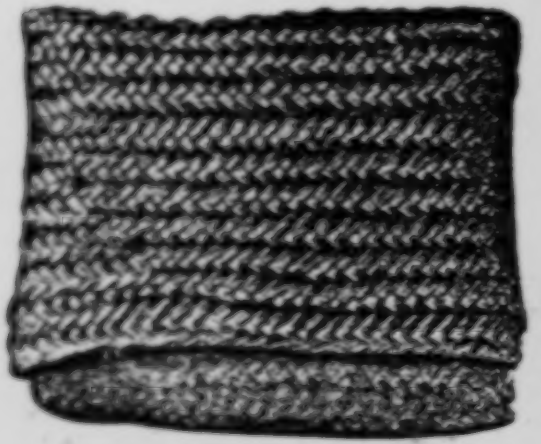

Fig. 114. Chiriguano cigarette case in twilled work. Prov.: Caruruti. (2/3 nat. size.)

Figure 112. Height, 10 centimeters; diameter, 36 centimeters. Provenance: Caruruti.

This hat is made exactly according to the technique of the baskets of Plate LXXVIII and Figs. 110 and 111.

/456 cont./

285 294 A half-finished hat (Fig. 113) which I was able to acquire at Carurutí shows well the process of fabrication. The basket-maker begins by making the crown of the hat, interlacing 36 tigellas and shortly afterward adding other supplementary stalks whose ends are seen protruding. When the hat is finished, all those projecting beyond the fabric are cut off. The rhythm of the crossing elements is twofold.

285 276 Figure 114. Length, 10 centimeters; width, 8 centimeters. Provenance: Carurutí.

This cigarette case faithfully imitates the ones the Chiriguano have seen in the hands of half-breeds or creoles. Nevertheless, its technique is interesting, for it is purely indigenous. The /Plate LXXXI appears here/ /457/ tigellas of karandaí leaves cross in a twofold rhythm.

The Chiriguano are not great smokers and it is rare to find cigarettes among them, so that these cases seem to me to be made for amusement rather than for their practical utility.

Sieves

415 252 [262] There is no Chiriguano housewife who does not have at her disposal at least two sieves. The importance of this kitchen utensil corresponds to the considerable role of corn flour in their food. Of the 12 different dishes that the Chiriguano prepare from this grain, there are six or seven in which it appears in the form of flour. Kāwi itself is made with corn pounded in a mortar and then passed through a sieve. Sieves serve also for cleaning beans and ridding them of the stones and dust accompanying them. Finally, sieves are used for straining kāwi after cooking and for separating the liquid, which is to ferment, from the marc or temišu. They can also be used as simple baskets, and I have seen some holding cotton seeds.

1: Métraux--313 E-5 (1929) 1930 SF10 Chiriguano SF10

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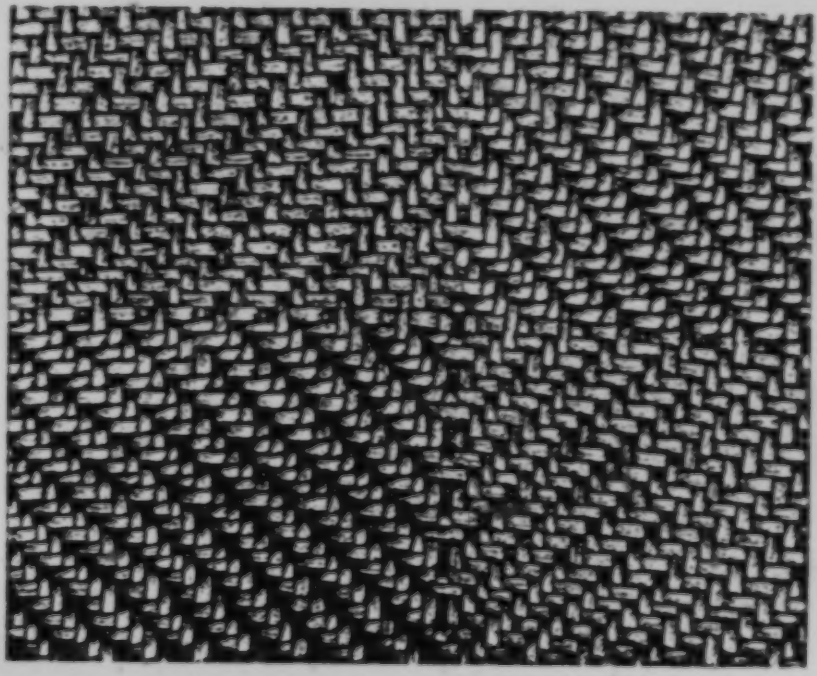
1. Details of the technique of the basket of Figure 110.



2. Details of the technique of the sieve of Plate LXXXI.

/457 cont./

C 415 285 Sieves are of two kinds. The first category includes those whose meshes are close together and composed of fine strips of karandaí leaves intercrossing in a binary rhythm. Sieves of this type belong in the basketwork called twilled. The Chiriguano give them the name of urumpé and use them in preference to the others, whose usage is limited.

The second category includes sieves with wide meshes. The strips forming them cross in checkerwork, that is, the woof passes alternately under, then over, an element of the warp. The Chiriguano designate sieves of this type by the name of urumpesa, and they use them for sifting ground corn when they wish to obtain a coarse flour.

E 415 285 191 Some of these sieves are real works of art, but they cannot be compared with the magnificent specimens from Guiana, on which the alternation of the black and white elements produce geometric figures of the handsomest effect. It is probable that formerly the Chiriguano had identical sieves, as can be supposed from the one on Plate LXXXII, which is composed of a warp and a woof whose gray and white elements are arranged in such a way as to form dark and light bands on which concentric squares stand out.

C 415 191 The sieve is widespread in all of tropical America, where it is used not only for corn flour but also for that which the natives make from bitter manioc. It is unknown to the primitive populations of the Chaco, who have not even felt the need to borrow it from the Chiriguano or Chané. The populations of the Inca Empire /458/ did not know its use. The urumpé is a utensil common to nearly all the Tupi-Guarani tribes: it has been described or noted among the Tupinamba, the Guarani, the Kainguá /Caingua/, the Guarayú, the Pauserna, the Apiaká /Apiaca/, and the Parintintin. C [194] The Chiriguano must therefore have taken along with them when they emigrated from Paraguay, which does not exclude the fact that they may also have found it in use among the Chané.

/458 cont./

285 I was present at the making of a sieve at Carurutí in the Caipipendí valley. Here is what I noted about it: "The raw material is furnished by the leaves of the karandaí palm (Copernicia australis), which is cut into fine strips. The plaiting is done very simply: they form a square by crossing at right angles the elements of the woof and warp, following the rhythm of 1 (one element over, the other under, etc.) In order to slip in the woof elements, it suffices to raise each time all the strips

Fig. 115. Detail of the rim of the sieve of Plate LXXXIV, 2.

of the warp which have already been crossed by the woof. When the sieve is plaited, they choose a straight, flexible branch and carefully split it in two. Each of the two halves is bent into a circle so that one of the hoops can fit into the other. The unplaited elements of the warp and woof are inserted between the two hoops (see Fig. 115), then securely tied. Since the hoops have a diameter a little smaller than the width of the woven square, the result is that when it is fastened into the circle, it bulges out. All the ends which stick out are cut off."

285 283 The string used to attach the sieve to the hoops is made in the following manner: "The bark of a tree (embira) is taken off in wide, long strips, in turn divided into finer lengths. They take two of these lengths, moisten them with saliva, and roll them on the right calf, each one separately, then the two together. When the cord must be of a certain length, they have to add new pieces. These splices must be made without changing the diameter of the cord and without any gaps. For that they are always careful

/458 cont./

285 283 to roll together two strands of unequal length. When one of them has been rolled to the end, another is added. Any possibility of breaking is thus avoided. The movement of the hand is downward when they form a strand, and upward and downward when they roll the strands together to make the cord. The cord, at first fine, grows thicker, but slowly."

285 Plate LXXXII. Diameter: 43 centimeters. Provenance: Igüembé valley. /Plate LXXXII appears here./

/459/ This urumpé is a remarkable specimen from every point of view. The elements composing it cross according to a binary rhythm, that is, each

Fig. 116. Sieve in the process of being made. Prov.: Saladito (upper Pilcomayo)." (About 1/4 nat. size.)

element of the woof passes under or over two elements of the warp. Darker stalks alternate by sections with lighter ones and form gray and light-colored bands which run parallel and cross at right angles.

It will be noticed that, having arrived at the vertical diameter, the elements of the woof, which until then had obeyed a binary rhythm, change it abruptly. The first time, the stalk crosses over; the second, it passes under three elements of the warp:

[TEXT CONTINUES ON P 318]

1: Métraux--317 E-5 (1929) 1930 SF10 Chiriguano SF10

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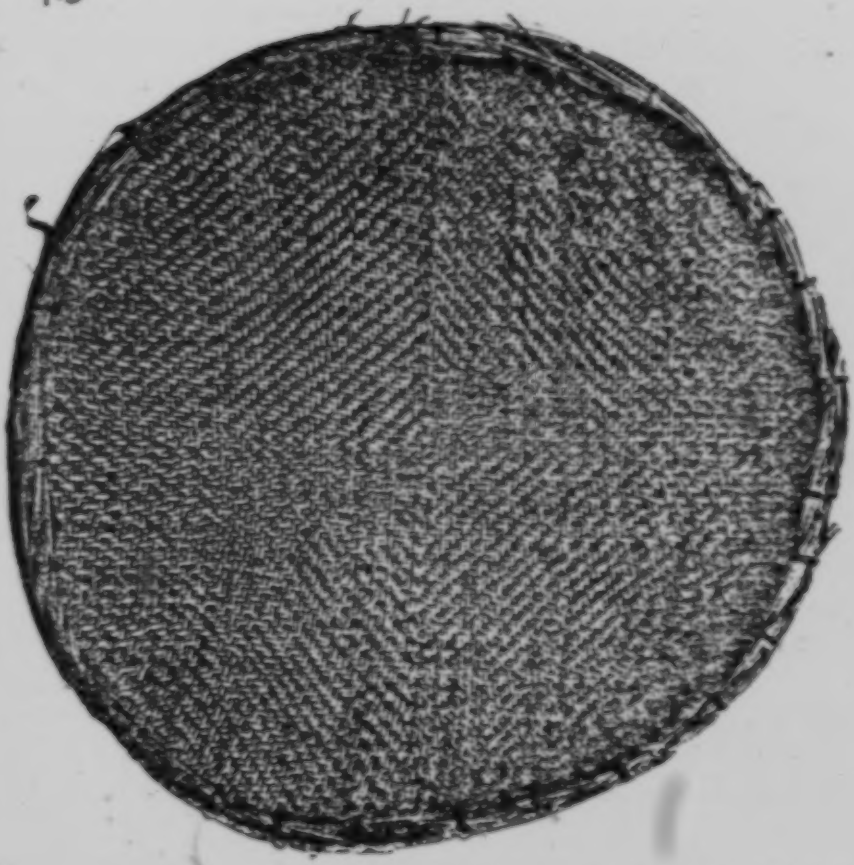
Plate LXXXII



Sieve (urumpé). Prov.: Igüembé Valley. (1/3.5 nat. size.)

/459 cont./

285 the third, it again passes under one single element, then again three elements are crossed over, then only one, to recommence passing under three elements, then again under one. This new rhythm continues along the whole length of the vertical and horizontal diameter and permits the formation of the sides with concentric squares (see Plate LXXXI, 2 /see p. 313/).

/460/ Plate LXXXIII, Figure 1.$\frac{2}{n}$ Diameter: 43 centimeters. Provenance: Ivu.

The technique and decorative process are exactly the same as for the preceding specimen, with the exception, however, of the alternation of the dark and light fibrous bands.

Plate LXXXIII, Figure 2. Diameter: 33 centimeters. Provenance: San Luis region.

This urumpé is made according to the same principle as the other sieves, but it does not involve the change of rhythm along the two diameters. Consequently, it does not appear to be embellished with any geometric motif. The warp and woof elements always cross in pairs.

Plate LXXXIV, Figure 1.$\frac{2}{n}$ Diameter: 42 centimeters. Provenance: Saladito.

The urumpesa are distinguished from the urumpé not only by the greater width of the fibrous strips composing the fabric but also by the technique of this fabric. The woof elements cross regularly those of the warp, passing now under, now over, but each time they cross only one single element. This technique is the one Mason calls checker work.

The intervals between the elements are also larger and facilitate the passage of big kernels of corn.

Plate LXXXIV, Figure 2. Diameter: 40 centimeters. Provenance: Saladito.

The principle of the technique is the same as for the preceding sieve, with the one exception that the warp and woof elements are very wide.

$\frac{2}{n}$ [See P 320--Analyst]
$\frac{2}{n}$ [See P 321--Analyst]

1: Métraux--319 E-5 (1929) 1930 SF10 Chiriguano SF10
Guiana SR1

/460 cont./

Fans or Fire-blowers

C 372 184 [191]

Great was my surprise when upon arriving in the Chiriguano villages of the upper Pilcomayo region I found fire fans identical with those of the Indians of Brazil and the Guianas. Nordenskiöld (10, p. 56) barely mentions them and insists on their rarity. The fact is explained by the absence of this cultural element in all the rest of the zone inhabited by the Chiriguano. In most of the villages they use old hats or fragments of baskets to fan the fire.

C 372 285

Plate LXXXV. $\frac{2}{4}$ Length, 28.5 centimeters; width, 31 centimeters. Provenance: Saladito.

The making of these fans is rather simple. The leaves composing them cross in a rhythm of two. On the edge the stalks have been bent back and, passing again across the fabric, are interlaced to form a pucker on each side. The free ends /Plates LXXXIII-LXXXV appear here/ /461/ have been plaited on top and one part passed into a split stick forming the handle (Fig. 117).

C [191]

An important remark must be made on the subject of these fans. They /Fig. 117 appears here/ differ little from the fans made of a single pinnate palm leaf, such as are found in Brazil and Paraguay. The Chiriguano, having no palm trees of this species in their new homeland, had to /Fig. 118 appears here/ adopt the palmate leaves of the karandaí. They replaced the petiole, which forms the handle, with the split stick to which I have alluded. (Max Schmidt, 2, Figs. 106 and 107, pp. 219-220.)

C 285 353 797 [824]

/462/

"Flowers"

On feast days the Chiriguano of the Franciscan missions decorate the church with artificial "flowers" which they make from leaves of karandaí palms. These decorations are of ancient origin and derive directly from the straw amusements /jeux/ still made by the Indians in various /Fig. 119 appears here/ regions of America, notably in the Guianas. The natives of the latter region often hang them in their houses where they perhaps

G 285 353

$\frac{2}{4}$ [See p. 322--Analyst]

[Text continues on p. 324]

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Chiriguano sieves (urumpé). Prov.: 1. Ivu; 2. San Luis (Tarija department). (Scale, No. 1, 1/5; No. 2, 1/4 approximate nat. size.)

Plate LXXXIV

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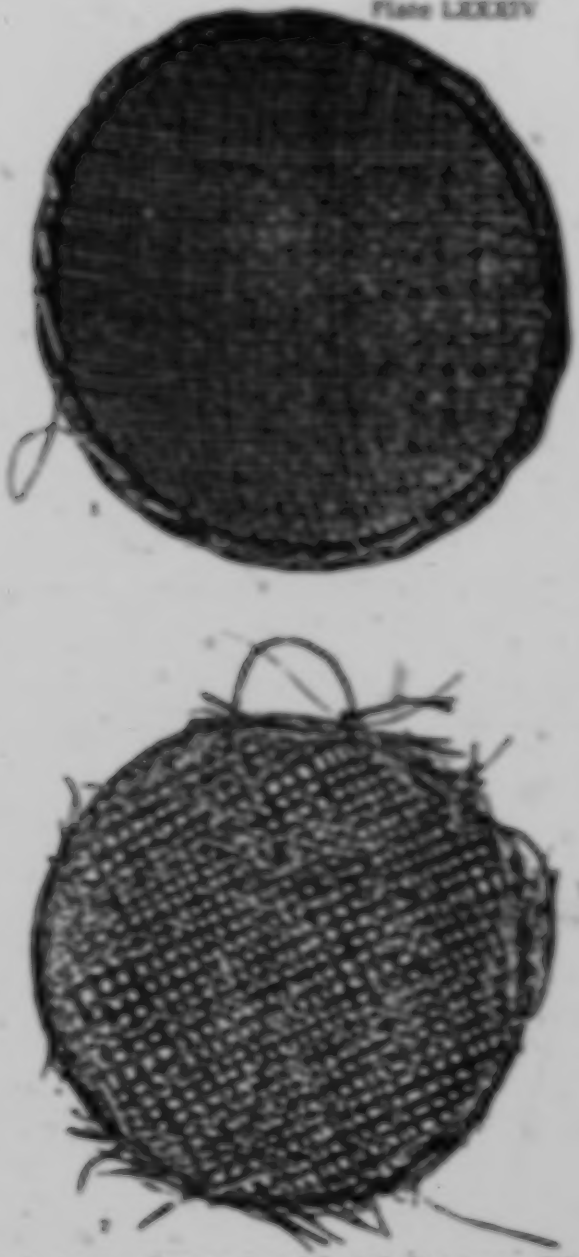
415



Large-mesh sieves. Prov.: 1 and 2. Saladito (upper Pilcomayo).
(About 1/5 nat. size.)

285 394

Plate LXXXV

Fan or fire-blower of plaited palm leaves. Prov.: Saladito (upper Pilcomayo). (1/3 nat. size.)

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Anthropological Series
Volume XIX, No. 3

Lt Métraux--223 E-5 (1979) 1830 SF10 Chiriguano SF10
Guiana SR1
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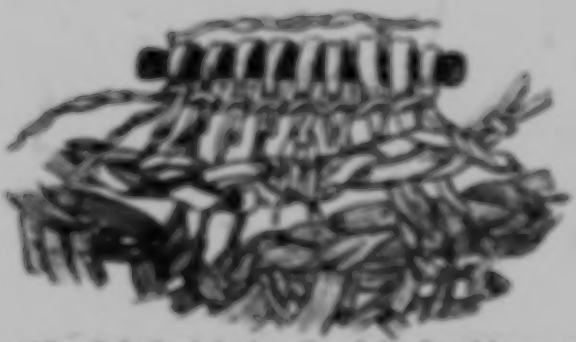

Fig. 117. Detail of the handle of the fire-blower of Plate LXXXV.

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Fig. 118. "Flower," ornament made of plaited palm leaves, which the Chiriguano have blessed and with which they decorate their huts. The technique of this object is very ancient and is found also in Guiana. (1/4 nat. size.)

Is Mémoire--204 8-5 (1927) 1000 SP12 Chiriguano SP12
Chaloma SP1
Chorote SP5
Ashluslay SP5
/462 cont /

serve as amulets, and in any case, as ornaments. (Roth, pp. 497-498. Figs. 361-364 and p. 770; Koch-Grünberg, 3, Vol. II, p. 364.) In the same way the Chiriguano Indians decorate their huts with these figures, which they take care to have blessed. Exactly as in Europe they keep palm branches as lucky charms. Rosen (1, p. 61, Fig. 51) publishes a similar straw ornament which he found among the Chorotí and which was pointed out to him as an ornament worn on the forehead. This explorer suspects the exactitude of this information and supposes that a ritual object is concerned. In reality, it is only a "flower," which the Chorotí described by Rosen probably received or bought in some Chiriguano mission. It is enough to compare the figure of it that he gives us and ours in order to be convinced of this.

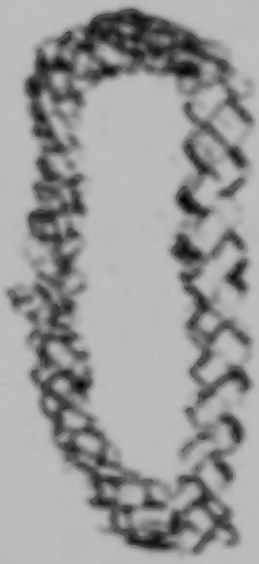

Fig. 119. Wreath of plaited palm leaves (ornament or ornament?). Ashluslay. From: Ernesto Fatalle. (1/6 nat. size.)

Figures made of palm leaves are not, however, unknown to the other Indians of the Chaco. The Ashluslay sold me a headdress braided according to this principle (Fig. 119) and Rosen (1, Fig. 44, p. 48) reproduces an identical head-ornament which he bought from a Chorotí tribe.

2 Méthreux E-8 (1929) 1948 SF10 Chiriguano SF10
Chane SF 8

are found on a triangle surmounted by a scroll, which is multiplied in repetitive variations.

Women potters (pl. 42, top, left, and bottom, left) tempered the clay with crushed potsherds and built up their vases by coiling. They painted them with several kinds of ocher and with black obtained from resin.

Spinning and weaving.—Among the Chiriguano, wool is more commonly used than cotton for textiles, but Chané fabrics are generally of cotton. The fibers are spun with a drop spindle weighted with a clay wheel (pl. 42, center). Although garments are in part fashion in shape, the loom remains of the vertical type. Formerly, indigo was the favorite native dye; today aniline dyes have entirely replaced it. The ornamentation of the fabrics is limited to a few stripes.

Netting.—Fishing nets and carrying nets are made by means of a wooden gage in a reel-knot technique.

Basketry.—Fine, round baskets with overlapping lids, and sieves are coiled with palm leaves in the best Guiana fashion, but wickerwork basketry is very common. No large baskets for carrying or storing food are made.

Gourds.—The painted, incised, or fire-engraved (fig. 61) gourds (*Lagenaria siceraria*) used as cups are, after pottery, the best engravers of Chiriguano art. The motifs are mainly geometrical, with occasional realistic representations.

FIGURE 61.—*Chané calabashes. Left:* Specimen with lid (approximately ½ actual size). *Right:* Pyrogravé specimen (approximately ⅓ actual size). (Redrawn from Nordenskiöld, 1930, fig. 30 and Métraux, 1930 b, pl. 42.)

/Tr cane/

as enough as cane. Beyond Santa Cruz there are still groves; in addition there are groves of another cane called "Bambú," which is the best known, and in Chiriguano it is called "Tacuarembo." It rises to a height of about 15 meters and is used for making /T/ ladders and scaffolding in construction because it is light and strong. The shoots are tender and constitute a vegetable commonly highly regarded by the Indians; it is cut straight much valley, because there are abundant plantings of sugar cane, which is of great utility for the production of sugar and alcohol. This last thrives with great ease and little work. Planting is done in two ways, making furrows and burying it or planting cuttings. The former is the better method where the feathers of the rivers do not penetrate. On the slopes and tops of hills which contain water there is another sort of slender cane, very strong and heavy, which is not hollow like the other classes and is called caña brava by the whites, and "Tacuarembo" by the Chiriguano. They use it for weavers' reeds and for sleeping cots.

TAMARIND. -- This beautiful and useful tree is not native, but it thrives with enough care and grows to a respectable height; the fruit that it produces is abundant, consisting of abundant pods more or less the size of chick-pea pods; the pulp is blackish and pleasant to the taste, but it is bad for the teeth. It is astringent and is administered as medicine for intestinal inflammations, especially to children. It is also a good tonic drink on excessively hot days; it is prepared with sugar, water, and a little of its pulp. The tree is rather sensitive to cold, and the flowers wilt easily with the south wind. For this reason the whites plant it in their patios, which are surrounded by the living quarters.

TARINGUI. -- The name of this tree is Chiriguano. The taringui is found in some regions, but not in others. It is of the cactus variety, rises up to six meters, its branchage is abundant and close, which gives a fine shade against the blazing rays of the sun. Its branches or leaves are striated and armed with spines; the fruit is tiny, but sweet and otherwise pleasant, and much liked by foxes, who only get it when it falls from the tree. The viola or aguaita is smaller than the taringui, its leaves have the same form, the color is ash-gray and they are less a abundant, or, more properly, few. The fruit is a smooth berry

ai Nino--287 M-3 (1892-1911) 1917 9710 Chiriguano 9710

/187 cont./

301 302 [199] boy in the story, an active since the founding of the missions. The Chiriguano with his vigorous head of hair and his red Tapa-rato /168/ walks very proudly and shows off both things at feasts in the presence of his companions (?).

[199] [114] [121] 1. An interested party once said that the mission in Yumbis had no purpose because the Indians were civilized. I am sure that this is not true, because the explorer who wants to learn the old customs of the Indians can study them better there than anyone else today. There they wear long hair, the tembeta /lip plug/, and balaca, or band, from childhood.

291 294 ● 285 To cover the head they do not all wear a hat. The latter is woven by them themselves with palm leaves. Carandaiti they bring them from the places where they are abundant. Carandaiti, pull out the whitest shoots /cogollos/, take them to their houses, then string them one by one on a long cord, which they make of the same palm, tying them to each other. They hang them there and the action of the air whitens them much more. Then they divide each leaf of three or four shoots into leaflets no larger than 2 1/2 centimeters and begin to weave at the crown, where they form a cross with these leaflets, which they then keep weaving, and, as one ends, they add another, and when the work reaches the edge or brim, they stick the ends in so that the hat will not come undone, pull strongly, cut off the ends, and a round hat has been finished.

Others form long strands one centimeter wide and sew them to one another with cotton thread, and these hats are imperfect cones lined with black or red cloth. They are used by older Indians, those of importance, caciques and sorcerers (?).

291 302 304 178 2. The Quichua /Quechua/ always with his cap, the Chiriguano is abandoning the custom of long hair, the lip is pierced for the tembeta in few places now, and the straw hat is being

292 554

4: Nimu--284 M-1 (1909-1911) 1912 SF10 Chiriguano SF11

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/208 cont./

love can accomplish much, and they really love their children, without making much outward show of this.

Finally, the man, whenever he wishes, can dismiss his wife with great ease. He does it with contempt, in biting words, calling her Cuña pocki, bad woman, Cuña imoquere, lost woman, good only for lighting the fire. No one could endure such scenes for an hour, and she understands that the rascal has won the love of another, younger woman.

515 When a mother goes to the spring or river, she takes her son or daughter with her, bathes herself and also her child, and then grinds up some grains of Jettira, a kind of potash, leaving her hair and that of her daughter clean and shiny. The bath is daily, but the washing of the hair with Jettira is not.

/206/ Pregnancy and Birth

843 When a woman finds herself pregnant, she does not give up her customary chores, but goes to the field as usual and fetches from there heavy loads of maize and other things.

482 285 [171] They use for this, as I have already noted, a kind of close-woven net which the Toba make with the bark of the caraguata or maguey. Those made by the Chiriguano are like the wooden fruit-baskets /chipa/. They are open on top, where they have an easily untied cord, in the middle of which there is a wide band for holding the weight with the forehead (1).

482

1. The Chiriguano woman lets all the weight of the load she is carrying rest on her spinal column, etc., holding it with her forehead. If the water is some distance away, she does the same; if not, she carries the vessel vertically on her left shoulder, or on her head, where she places a pad of rags.

5:Nordenskiöld E-5, K (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8.

Basket-work.

In contrast to what is the case among the Choroti and Ashluslay, a good deal of basket-work is found among the Chiriguano and Chané, though less than among the tribes of N. E. Bolivia — this being due to the lack of suitable basket-making material.

There is unfortunately no complete work[1]) on different types of baskets and different kinds of basket-technique embracing the whole of S. America. Such a work cannot

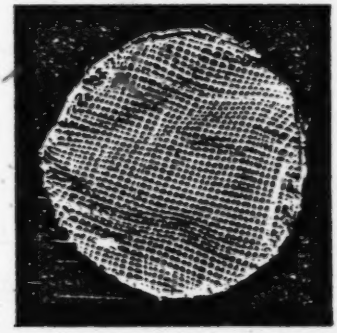

Fig. 52 Sieve. Chané, Rio Parapiti. G. M. P. 114. 1/8.

be accomplished without access to a number of the great museum-collections. It is not, of course, from the Chaco nor, as a rule, from the west, that the Chiriguano and Chané received their basket-types and various kinds of basket-technique, but from the north. Baskets of grass, built up spirally, which seem to be very characteristic of the western area of civilization, are not found here at all[2]) Neither the

[1]) Mason had far too little material from S. America at his disposal.

[2]) This technique, the so-called »Coiled basketry» has a much wider distribution than is indicated on Wissler's map. Very rarely one sees these baskets among the Mataco. They are very common at Arica on the coast of Chile.

5:Nordenskiöld E-5,4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chané SF8

Neither the Chiriguano nor Chané have carrying-baskets. They have carrying-nets instead.

In Part I I related how, in the year 1909, I came with some Guarayú Indians to the Chané and Chiriguano country. As there was no palm with parapinnate leaves, they were unable to make themselves new carrying-baskets instead of their old ones which were worn out. Should their tribe, for any reason, be compelled to emigrate to the Chiriguano and Chané country, they must alter their type of carrying-basket. It is quite possible that something similar has befallen the Chiriguano and Chané. They did not find suitable material for basket-making and so they learnt from the original inhabitants to make and use carrying-nets. Of the carrying-nets used by neighbouring tribes, those used by the Chiriguano and Chané most resemble those found among the Yuracáre.

In N. E. Bolivia, where palms abound, the Indians often make baskets for occasional use of a single palm-leaf. The whole basket thus consists of one palm-leaf. MAX SCHMIDT has given a minute description of such baskets. They occur among the Chané on the lower Rio Parapiti and, more rarely, among the Chiriguano. It is, at present, impossible to define the distribution of such baskets, since the majority of explorers have paid them no attention. There is a considerable difference of make in different places. In my collections I possess such baskets from the Chimáne, Ixiama, Cavina, Huanyam, Itonama, Pauserna, Churápa, Yuracáre, Siriono, Guarayú and Chacobo, as well as from the Chané and Chiriguano. It can be said that, practically speaking, they were used by all the Indians whose acquaintance I made on my travels excepting the Choroti, Ashluslay, Toba, Tapiete, Mataco, Quichua and Aymara.

The »Urupé» is a type of basket which I have already dealt with in the foregoing, and I beg to refer to what I said there.

5:Nordenskiöld E-5,4(1908-1909, 1913) 1920
SF10 Chiriguano SF10

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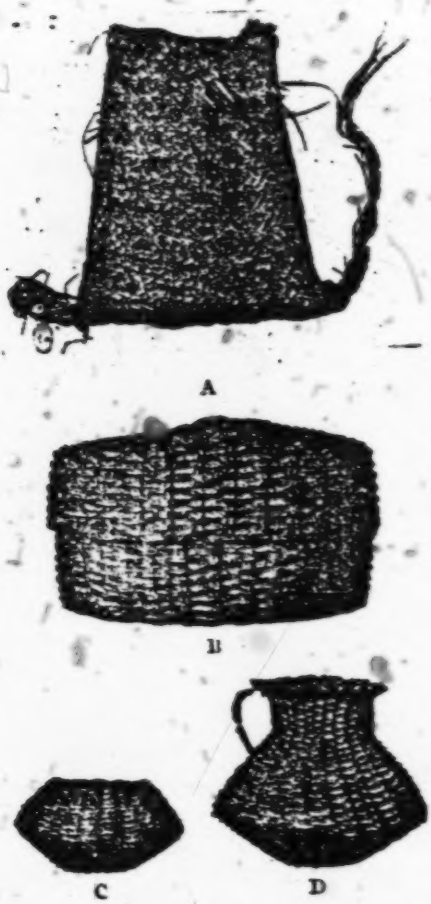

Fig. 53. Baskets from the Chiriguano.

A = R. M. E. 885.
B = » » » 507.
C = » » » 174.
D = » » » 542.

5:Nordenskiöld E-5/4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8

A basket-making technique sometimes seen among the Chiriguano is the one reproduced in Fig. 54. Otherwise, I only know it from the Yuracáre and Atsahuaca. We are also acquainted with it from the Araucanians[1]), and from several tribes in N. W. Brazil.[2]) The THULIN-LILJEWALCH collection in the Gothenburg Museum has several baskets in this technique from Indians at Roraima in Guiana.

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Fig. 54. The technique of a basket plaited like R. M. E. 507, 174, 542.

The Chiriguano and Chané (at Rio Parapitî) possess baskets with overlapping lids. This type of lid seems to have a northern extension in S. America. The baskets I have seen from the western area of civilization, are from excavations on the coast of Peru. They have lids which are opened like the lid of an ordinary cigar-box. The distribution of baskets with lids may be seen from the map 14 and from the table below. Such baskets are not mentioned by MAX SCHMIDT from Guató, nor from the tribes on the upper Rio Xingú.

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[1]) LATCHAM (1) Plate XXXV.
[2]) KOCH-GRÜNBERG (2) Vol. 2, Fig. 142—143.

5:Nordenskiöld E-5, (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians 53

Table 17.

Baskets with lids. Map 14.

Baskets with overlapping lids.

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4. Chiriguano, R. M. E. 545. (common).
5. Chané, R. M. P. 208. (rare).
6. Mataco, R. M. M. 434. (Only one).
13. K[illegible]rajá, KRAUSE Pl. 57, Fig. 16.
23. Yuracáre, G. M. 13. 1. 641.
24. Chimáne, G. M. 15. 1. 1018.
25. Mojo.
31. Ojana, Trio, GOEJE (1) Pl. VIII. Fig. 1, 7, 8.
32. Atsahuaca, R. M. 05. 16. 444.
36. Ijca, BOLINDER (4)
37. Motilon, » (2)
38? Tupinamba, LERY P. 358.
40. Guarayos (Guarayú). R. M. G. 83.
41. Pauserna, G. M. 15, 1. 863.
47. Indians Roraima, G. M. 12. 1. 128.
48. Indians Northwestern Brazil. KOCH-GRÜNBERG (2), Vol. 1, Fig. 74, 174.
54. Guahivo, R. M. (H. M. K. II. 31.)
55. Caribs, Coast of Guiana, STEDMAN Vol. 2, P. 121; BARRERE P. 138.
62. Chacobo, R. M. Ch. 112.
7 p. Oyampi, CREVAUX P. 202.
7 S. Arawaks, Coast of Guiana.
8 F. Indians Bogota, UHLE (1) T. 2, Pl. 8.
9 F. Indians Andaqui, UHLE (1) T. 2, Pl. 8.
V5. Maquiritare, R. M. (H. M. K. I. 72).
5 M. Sebondoy, Pasto
3 I. Otavalo, Ecuador } UHLE (1) T. 2, Pl. 8.
3 I. Cayambe, Ecuador. M. C. (H. 1034, H. 1035).
2 I. Yumbo, Indians Rio Napo. Museum Stuttgart (L. 1455/10 a—b).

St Nordenskiöld E-5 μ (1908-1909. 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians 53

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Map. 14. The distribution of baskets with lids.

● = Baskets with overlapping lids.
○ = Baskets with lids which are opened like an ordinary cigar-box.

S:Nordenskiöld E-5 (1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chane SF8
South American Indians S3

X 3. Piaroa Rio Ventuari. Communication by letter from Prof. KOCH-GRÜNBERG.

Baskets with lids which are opened like an ordinary cigar-box.

A. Graves on the Peruvian Coust. G. M. Very commun in all collections of peruvian antiquities.

Some baskets from the Chiriguano have shapes which make them look like imitations of earthen vessels. (Fig. 53 C and D) Sometimes they even have an ear. Chiriguano and Chané baskets are very seldom ornamented.

Metal-work.

The only metal-work now occurring here is that the Chiriguano sometimes make their tembetas (lip-buttons) of tin themselves. Whether the Chiriguano and Chané, before coming into contact with the Whites, themselves performed metal-work, I cannot say.

Stone-work.

The Chiriguano and Chané do not now work stone.

Wood-work.

For their wood-work the Chiriguano and Chané now use exclusively tools obtained from the Whites.

Weaving.

Among the Chiriguano I saw two types of loom; among the Chané only one.

The loom found among the Chiriguano and Chané is characterized by the completed product forming a ring (seamless) N. B. if so desired. The warp is set up as shown in the outline drawing, (Fig. 55,3) and in the sketch of a band-loom from the Chané. (Fig. 55,1). When the ring is

[text continues on p. 176]

S:Nordenskiöld E-8,1(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chané SF8

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sent work.) It follows that these Indians used other material for their arrows in pre-Columbian days. The Choroti and Ashluslay probably had wooden shafts to their arrows, as Chuchio does not, and probably never did grow in their country. Before *Arundo donax* grew in the Chaco it must have been difficult in many places to find material for flutes, etc. Even in the country of the Chiriguano and Chané there were reeds only in certain parts, so that the introduction of *Arundo donax* may have been of importance for other things than the material for arrows.

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The difficulty of getting suitable material for basket-making has resulted in the baskets being of less importance to the Indians of the district under examination than to the Arawaks and Guarani-tribes elsewhere. Presumably the Chiriguano and Chané used to have carrying-baskets, which were supplanted by carrying-nets of Caraguatá or Yuchan.

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Pile-barns are probably a reminiscence from a time when the Chané lived in swampy parts.

I have already pointed out that the great cleanliness of the Chané and Chiriguano shows that they immigrated to their present habitat from warmer, well-watered parts.

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There are not many cultural elements of which we can say with absolute certainty that they were brought by the Chiriguano, and not by the Chané. Such are, however, urn-burials and »tembeta» of the kind now in use. This is not precluded by the fact that these cultural elements were originally western. Finger-mark ornamention, the wooden mortar, and certain bird-arrows, spindles of the Bakaïri type with a little knob on the top of the stick, are also cultural elements with such a distribution that we can assume that they were originally more intimately connected with the Chiriguano than with the Chané. Further comparative investigations, and access to an extensive quantity of the necessary material will doubtless enable us, from a study of the minor details in the external form of

6: Nordenskiöld--92 E-5 (1908-1909) 1912 SF10 Chiriguano SF10
Chane SF8

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Chapter Sixteen

On the Life of the Chané and Chiriguano Indians (Continuation)

Art and Industry

The Chiriguano and Chané are tribes whose art-industry is on a very high level. If one visits one of the huts of the white settlers in these regions, one will not see many products of native industry, not much of their own culture. I know of absolutely nothing that these people are capable of doing which can compare with the pottery and the weaving technique of the Indians. One thing is certain, the more "civilized" the Indians become, the less they accomplish in the way of art and industry. They do not learn much more from the whites than how to make and drink liquor. Indian art-industry is gradually disappearing here, the more the Indians come in contact with the whites, but it is not transformed. It remains largely purely Indian until its final destruction. One industry, however, is now in the hands of the whites, namely, the metal industry. The silver ornaments which, for example, the Chiriguano and Chané use are made by the smiths in the villages of the mountain regions. The half-white or Quichua /Quechua/ Indian population which we come across in the mountains west of the land of the Chiriguano and Chané Indians is quite skilled artistically. The weaving technique in particular is very highly developed there. The Chiriguano and Chané undoubtedly learned a great deal from the west.

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Thus we find the serére pipe[2] (Fig. 120) characteristic of the Chiriguano in collections from the coast of Peru (1); /Plate

1. Serére also occur among the Lengua, Ashluslay, Chiriguano, Chané, Churâpa, and Yuracâre.

19 appears here/ /243/ the pin for fastening women's clothing

2 [A flute-like musical instrument--Analyst]

[TEXT CONTINUES ON P. 94]

/247 cont./

The Chiriguano and Chané men are clever in the decoration of calabashes (Fig. 126), carve attractive pipes (Fig. 120), and know how to tan leather, which they probably learned from the whites.

Among these Indians one does not see much in the way of plastic representations of animal and human figures. The clay /248/ vessels sometimes have animal shapes. The Chané women on the Rio Parapiti fashioned lumpy little dolls out of wax for their children (Fig. 105). Some of the clay vessels are painted with animal figures. A vessel from the Rio

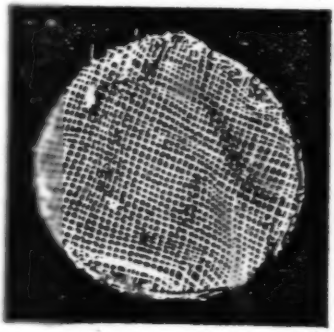

Fig. 124.
Sieve. Rio Parapiti.
1/8.

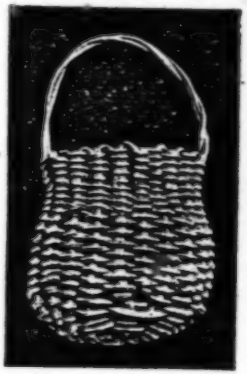

Fig. 125. Basket
Chiriguano.
Caipipendi. 1/6.

Itiyuro, which I acquired through barter, is adorned with tree figures. Occasionally one sees clay vessels in the shape of fruits.

I saw drawings representing human beings and animals on the walls in a few Chané huts and on a few Chiriguano calabashes from the Caipipendi valley.

As for basket work, the sieves are so popular among the whites that through trade they are being distributed far beyond the Chiriguano and Chané region. Otherwise the Chané and Chiriguano make few baskets. We find basket work in quantities only among the Indians where the matching-leaved palms begin, and that is at Santa Cruz de la Sierra.

Ee /248 cont./

439 When we present a collection from the Chiriguano and Chané,
177 we must not forget that, through trade between the tribes, they have obtained many things from the Mataco, Toba, Choroti, and Tapiete; otherwise we would have a mistaken conception of the
Ee great difference /249/ between the material culture of the Chaco
171 tribes named here and the Chiriguano and Chané.

If we compare the material culture of the Choroti and Chané
Ee with that of the Choroti and Ashluslay likewise described here,
[285] we must remember the following. The Chiriguano and Chané produce basket work -- the
C Choroti and Ashluslay never.
Ce The former know how to paint
[323] clay vessels before firing,
Ee which is unknown to the latter.
[286] The Chiriguano and Chané never make bags out of
C
[415] →
[531]

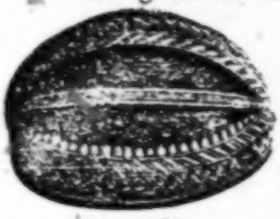

Fig. 126.
Decorated calabash bowl.
Chiriguano. Yacuiba. 1/5.

caraguata, etc. If, moreover, we compare all the products made by the Chané and Chiriguano with those of the Choroti and Ashluslay, we find that most of them are entirely differ-
C ent. The Chaco Indians probably learned how to make certain
[177] things, such as the serére (Fig. 120) and huiramimbi pipes (Figs. 36 /omitted in the translation/ and 80), from the Chiriguano,
Ee but this is relatively insignificant.
177 We see here how two cultures can exist side by side for hundreds of years without mingling.

Ee If we follow the Rio Pilcomayo down toward the mountains,
101 we first come across the Quichua /Quechua/ culture, then come the Chiriguano and Chané, and after that the Chaquensic /Chaco/ culture which embraces equally the Mataco, Toba, Choroti, and Ashluslay, as well as the Lengua and other tribes in the Paraguay Chaco. These three cultures are entirely different.

/16 cont./

342 A special feature of Chiriguano houses and where they differ from those of the common ranchos of white residents is that the two oblique sides of the roof descend almost to the ground, passing far beyond the wall. Machareti houses also show this special feature. (Cf. Fig. 14 /see p.40/.) The result of this roof construction is that the entrance (ðkye) is on [285] the gable side. To shut the entrance they use reed mats or [237] cowhides (65). Widely influenced by the whites, the Chiriguano [177]

65. Métraux I, p. 469.

and the Chané continually vary the style of their houses, and, according to Nordenskiöld (66), today many of them are al-

66. Nord. 1, p. 173.

ready building houses identical with those of the whites.

343 In addition to the houses used for dwellings, the Chiriguano and some of the Chané have houses built on posts for storehouses (avatió). Also in Machareti such houses were commonly found beside the dwellings. Figure 16 /see p. 41 / shows such a [417] storehouse. A ladder, which consists of a post provided with notches, leads to the platform (on the right in the figure). These storehouses serve primarily as places to keep the maize crop and other produce. The space under the platform serves for storing various other things. Nordenskiöld saw such houses built on posts, whose upper part served in general for storage, while the lower part was utilized as a dwelling (67). Often those

67. Nord. 1, p. 175; Nord. 2, p. 3.

storehouses are near the plantings far from the dwellings (68).

68. Nord. 1, p. 173.

[335] As shown in Figure 16, the frame for these storehouses consists of ten vertical posts of different lengths, bifurcated at their upper ends to support the horizontal posts that form the base for

E. Schmidt--115 E-5 (1935) 1938 SF10 Chiriguano SF10
Chané SF8
Izozo

Plate XIV

Fig. 40

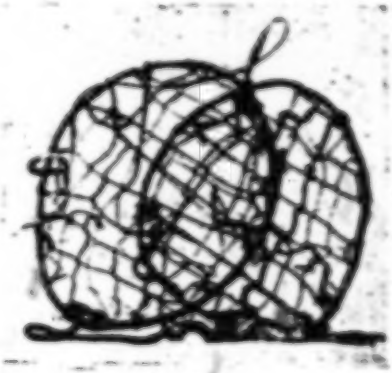

Fig. 41

Fig. 42

Fig. 43

/The captions are on p. 117./

fr Schmidt--117 E-5 (1935) 1938 SF10 Chiriguano SF10
Chane SF8
Izozo

/Captions for Plates XIV and XV./

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372
415

Fig. 40. (I. A. 516) Implements for flaking fire (Chiriguano):
a (I. A. 516a), bag as receptacle for the implements, length 16 cm., width 8.5 cm.;
b (I. A. 516b), cotton wick, length 62 cm.;
c (I. A. 516c), receptacle for the end of the wick, nest of a species of wasp, length 4.2 cm.;
d (I. A. 516d), piece of a metal file, length 4 cm.
e, flints.

C
[237]
C
415
295

Fig. 41. (I. A. 583) A pair of hoops for storing goods (Chiriguano), diameter 43 cm.

Ce
415

Fig. 42. Calabashes for carrying water (Izozo):
a (I. A. 661), height 49.5 cm.;
b (I. A. 662), height 16 cm.;

Ce
[824]

c (I. A. 665), height 17.5 cm., made out of the fruit of the tree Crescentia Cuyeta /Crescentia cujete/.

C
295
796

Fig. 43. Objects plaited out of palm leaves, used in religious festivities (Chiriguano):
a (I. A. 1439), length 72 cm.;
b (I. A. 1440), length 37 cm.

C
415

Plate XV. Baked clay vessels for cooking foods (Chiriguano).

Fig. 44 (I. A. 414). -- Height 24 cm.
Fig. 45 (I. A. 418). -- Height 23.5 cm.
Fig. 46 (I. A. 413). -- Height 26 cm.
Fig. 47 (I. A. 419). -- Height 22 cm.
Fig. 48 (I. A. 412). -- Height 12 cm.
Fig. 49 (I. A. 417). -- Height 22 cm.

M. Schmidt--155 E-5 (1905) :906 SF10 Chiriguano SF10
Chane SF8
Izozo
Paress. SF19
Ce 283 191

/80 cont./

form, many of them being similar in form to the whorls of the ancient Peruvians. Cf. Figures 89 and 90 /see p. 147/.

P 285 198

The Technique of Plaiting

In a legend told to me by a Paresí Indian in Mato Grosso, the appearance of a new epoch is discussed. The young generation of the Paramán /Paresí/ complains to the grandfather that they have now forgotten the manufacture of the bottoms of their different baskets, that is, the beginning and thus the rudiment of that work. The Chiriguano can make the same complaint to their grandfathers. They have also forgotten, as a result of the appearance of a new era, that is, as a result of their contacts with the whites, most of the elements of the art of plaiting, and imitations of European merchandise or of the plaited objects of neighboring Indians, less cultivated than they, are only poor compensation.

C 285 198

C 285 191

Of the four principal types into which all the plaited objects of the Indians of South America can be classified with regard to their technique, which I have called in my publications which deal with them (259) "Stufengeflechte /step plaiting/,

> 259. Max Schmidt. Lehrbuch der Völkerkunde /Textbook for Ethnology/. Berlin, 1924, pp. 154-157.

Doppelfadengeflechte /double-thread plaiting/, Rohrstuhlgeflechte /caning/, and Geflechte in Spiralwulsttechnik /plaiting in coiling technique/," only the first two can be found among the Chiriguano and the Chané-Izoceño. It is surprising that the fourth type (Geflechte in Spiralwulsttechnik) of plaited objects does not exist among these Indians, because this technique was the most common one in the mountainous regions neighboring Chiriguano territory.

Chane SF8
Izozo

/60 cont./

C 285 Plaited objects of the first type are made in such a way that the strips of one group are plaited with the strips of another group vertical to the first one, in such a way that the strips of the first group pass alternately a certain number of the strips of the second group and are passed by them, and in such a way that the meshes which go in the same direction form lines of steps. The number of the strips passed each time by one strip of the other group is generally three or two at a time, but there are cases in which only one strip is passed each time.

C [126] [513] [415] [291] Among the plaited objects of this type, I obtained from the Chiriguano a large sleeping mat, small flat baskets /canastillas/, sieves, a quadrangular basket /cesta/, and a hat, and from the Izozó small flat baskets /canastillas/ similar to those of the Chiriguano and two different kinds of baskets /cestas/. In addition, the Chiriguano and Chané also infrequently use fans for fanning the fire (tapèkua) plaited out of palm leaves (260).

Cc [415] [126]

C Cc 285 372

260. Nord. 1, p. 56.

Métraux has described and shown in a drawing such a fan for fanning the fire. This fan is plaited out of the leaves of the caranday palm in the "Stufengeflechte" style, in such a way that strips of the first group pass alternately two strips of the second group and are /Plates XXVI-XXVII appear here/ /61/ passed by them. The leaflets, separated from the stem, enlace a stick which, forming the upper edge of the fan, replaces the stem of the pinnate leaves of other palms which are used by other tribes of South American Indians in the manufacture of plaited fans (261).

C Cc [824]

261. Métraux I, pp. 460 and 461 and Plate 85.

8: Schmidt--157 E-5 (1935) 1938 SF10 Chiriguano SF10
Chane SF8
Izozo

Plate XXVI

Ce 285
C 285
C 285

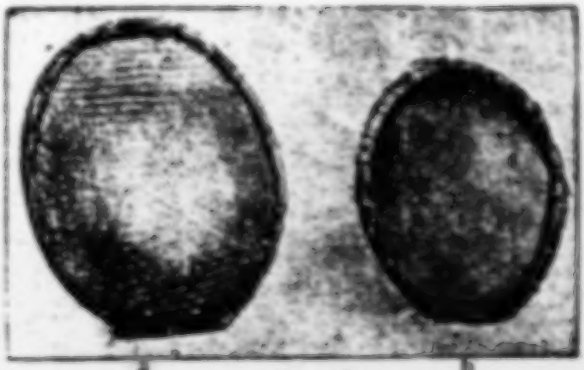

Fig. 92

Fig. 93

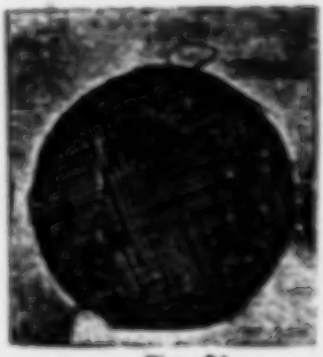

Fig. 94

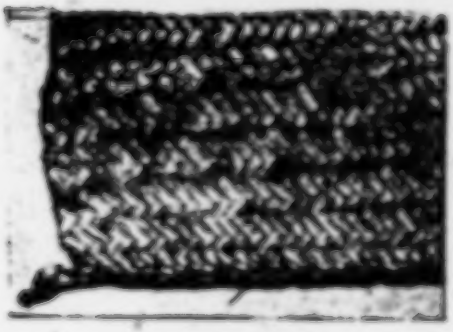

Fig. 95

The captions appear on p. 159./

fr Schmidt--156 E-5 (1935) 1938 SF10 Chiriguano SF10
Chane SF8
12020

Plate XXVII

Ce 285

Fig. 96

Fig. 97

Ce 285 ← C 291 285 →

Fig. 98

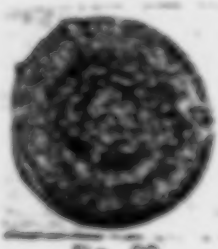

Fig. 99

Ce 285 ← C 285 →

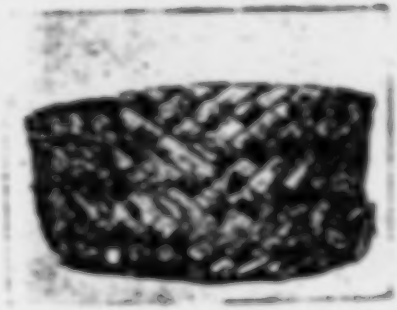

Fig. 100

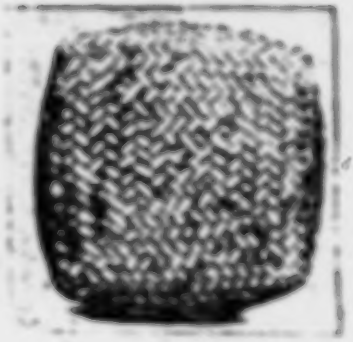

Fig. 101

/The captions appear on p. 159./

M. Schmidt--139 E-5 (1928) 1256 1910 Chiriguano 1910
Chaco SFS
Bolo

/Captions for Plates XXVI and XXVII/

Plate XXVI. Plaited objects.

Fig. 92. Flat baskets /canastillas/:
a (I.A. 748) (Isoso), diameter 46 cm.;
b (I.A. 341) (Chiriguano), diameter 39 cm.

Fig. 93. (I.A. 346) Flat basket /canastilla/ (Chiriguano), diameter 32 cm.

Fig. 94. (I.A. 348) Sieve (Chiriguano), diameter 39 cm.

Fig. 95. (I.A. 340) Mat plaited out of caranday leaves (Chiriguano), length 1.72 m.

Plate XXVII. Plaited objects.

Fig. 96. (I.A. 681) Basket /cesta/ (Isoso), length 27 cm.

Fig. 97. (I.A. 683) Basket /cesta/ (Isoso), length 36 cm.

Fig. 98. Bottoms of baskets /cestas/ (Isoso):
a (I.A. 677), length 33 cm.;
b (I.A. 678), length 28 cm.

Fig. 99. (I.A. 354) Interior surface of a hat (Chiriguano), diameter 30 cm.

Fig. 100. (I.A. 677) Basket /cesta/ (Isoso), length 33 cm.

Fig. 101. (I.A. 351) Bottom of a basket /cesta/ (Chiriguano), length 32 cm.

G. Schmidt--160 8-8 (1935) 1936 SF10 Chiriguano SF10
Clark SF8
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/81 cont./

Plaited Objects of the First Type (Stufengeflechte) in the Collection

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I.A. 540. Mat (Chir.) Lgth. 1.72 m. Width 1.50 m. (Fig. 96)
I.A. 541. Flat basket (Chir.). Dia. 39 cm. (Fig. 95b.)
I.A. 542. " " " " 42 cm.
I.A. 543. " " " " 43 cm.
I.A. 544. " " " " 30 cm.
I.A. 545. " " " " 32 cm.
I.A. 546. " " " " 35 cm. (Fig. 93.)
Ca [285] I.A. 744. " " (Isoseé) " 36 cm.
I.A. 745. " " " " 37 cm.
I.A. 746. " " " " 46 cm. (Fig. 95a.)
I.A. 547. Sieve (Chiriguano). " 38 cm.
I.A. 548. " " " 39 cm. (Fig. 94.)
I.A. 549. " " " " 39 cm.
Ca 285 126 I.A. 551. Basket " Lgth. 35 cm. Ht. 16 cm. (Fig. 101)
I.A. 677. " (Isoseé) " 33 cm. " 16.5 cm. (Figs. 98a.100)
I.A. 678. " " " 26 cm. " 14 cm. (Fig. 98b)
I.A. 725.a. " " " 27 cm. " 13 cm. (Fig. 86a)
I.A. 679. " " " 21 cm. " 22 cm.
I.A. 680. " " " 29 cm. " 21 cm.
I.A. 681. " " " 27 cm. " 23 cm. (Fig. 97).
I.A. 682. " " " 21 cm. " 26 cm.
I.A. 683. " " " 36 cm. " 21 cm. (Fig. 97)
I.A. 684. " " " 51 cm. " 29 cm.
I.A. 685. " " " 44 cm. " 30 cm.
C 285 [291] I.A. 686. " " " 46 cm. " 34 cm.
I.A. 517. Small bag with cover (Chir.) " 9.5 cm.
I.A. 554. Hat (Chiriguano). Ht. 12 cm. Dia. 39 cm. (Fig. 99.)

The material of the plaited objects that I have mentioned above consists of strips of palm leaves or strips of cane, and that of the Chiriguano basket I.A. 551, of strips of wood. Because these Indians do not have palms with pinnate leaves available, they must use the peltate leaves of the caranday, from which comes the difference between the plaited objects of these Indians and those of other tribes.

C [529]

/61 cont./

of other tribes. For example, the Guató Indians make mats similar to the mat collected among the Chiriguano, as well as baskets similar to one type of basket from the Izozó, from the large pinnate leaves of the acurí palm (Cocos schizophylla Mart.). The stem or stems of these, from which go the leaflets that form the plaiting, form the upper edge of the mat or baskets. With regard to the caranday palm, it is necessary to detach the leaflets from the stem in order to place them in the position necessary for plaiting them with one another. Therefore the upper edge is formed like a braid to which the leaves are attached in order to be able to proceed to plait from this rudiment. The lower edge is also formed like a braid, which joins the free ends of the strips and terminates in two ends, one at each /62/ side, which project beyond the side edges of the mat. The mat is plaited in such a way that one strip passes two of the other group each time. The decoration is made up of simple stripes parallel to the upper edge of the mat.

The small flat baskets of the Chiriguano and Izozó are, in general, similar in form and dimensions. These are plaited with strips of cane and, at their outer edge, have a wooden hoop. Like the mat which has been mentioned, they are plaited in such a way that one strip of one group always passes two strips of the other group, and therefore the surface shows the same ornamentation, which consists of parallel stripes and is typical of all objects plaited in this way. In this ornamentation of the flat baskets there is one difference in that on some of them the entire surface is always filled with parallel lines, all going in the same direction (cf. Fig. 546 /see p. 157/), while the decoration of most of these small baskets consists of concentric squares (cf. Fig. 92 a and b /see p. 157/) formed by the combination of four surface units, two of which show parallel lines in the direction vertical to that of the parallel lines of the other two units. With regard to the details of the formation of such decoration by the technique itself, I refer to my publications regarding this matter (262).

262. Max Schmidt: Indianerstudien in Zentralbrasilien /Indian Studies in Central

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[113]

Brazil/, Berlin, 1905, pp. 330 ff.; and Die technischen Voraussetzungen in der Ornamentik der Eingeborenen Südamerikas/ The Technical Bases for the Ornamentation of the Natives of South America/.

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[126]

The three sieves that I obtained from the Chiriguano correspond to the flat baskets described above with respect to their exterior form and to the rudiment of the plaiting. They differ from the latter only in that their strips are a certain distance apart and in that one strip of one group always passes only one of the other group, with the result that the ornamentation of the surface consisting of parallel lines which is shown in the little baskets is not produced. These sieves are also provided with handles like the flat baskets of the Chiriguano. A sketch of a Chané sieve shown by Nordenskiöld shows that these Indians also use such sieves (263). Flat baskets and sieves analogous to

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263. Nord. 1, Fig. 124.

those mentioned are described by Métraux and shown by him in drawings (264).

264. Métraux I, pp. 457-460, Plates 83, 84.

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[177]

The technique of the Chiriguano hat (I.A. 554) is not original, but no doubt was received from the whites and perhaps was directly taught to the Indians in the missions. For us the technique of this hat is without interest, except for the fact that this technique is also applied by the Izozó to the making of a type of basket, a specimen of which is shown in Figure 98b /see p. 158/. The manufacture of the hat begins at the center, and the strips, the beginning of which is plaited, are augmented by the addition of other strips. See Figure 99 /see p. 158/. The style of plaiting is like that of all the other objects of this kind among the Chiriguano and Chané, so that one strip of one group always passes two strips of the other group.

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[285]

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C /62 cont./
C 285 177 The technique of the small bag I. A. 512, which has a cover and corresponds in form to a modern cigar case, is of no interest to us, because this is a product of modern manufacture.

C Ce 285 178 Baskets I. A. 551 (of the Chiriguano) and I. A. 677 (of the Izozó) are of special interest because they represent the product of a new era in which the primordial devices of the technique have been forgotten and therefore they have lost the typical

C 285 171 forms of the products of those techniques. The making of this type of basket, which is widespread among the Indian tribes of South America, begins with the making of the bottom and ends at the upper edge of the basket where the free ends of the strips are /63/ fastened. If we compare the structure of the bottom of these Chiriguano baskets with the structure of corresponding baskets of other tribes of South American Indians, such as with the structure of the baskets of the Bacairí on the tributaries of the Xingú River (Mato Grosso, Brazil) or of the tribes of the Rio Negro, our attention is drawn to the great difference with

C 285 respect to the conformity of the work. In my above-mentioned publications (265) I have described this kind of basket in more

C [113]

265. Max Schmidt: Indianerstudien, loc. cit.; and Die technischen Veraussetzungen, pp. 157 and 158.

detail, and I have demonstrated that the special design which appears in two variations on the bottom of most of the baskets of this kind that are not yet degenerate is consistent with the technique, because only a bottom decorated in this way can be a proper beginning in order to form the walls of the basket. Moreover, there is the difficulty that for the fabrication of the four walls of one of these baskets one needs twice as many strips as the number of the free ends which come out of the plaited square or rectangle which forms the bottom of the basket.

C Ce 285 Therefore, the Indians who still know exactly how to plait these baskets plait in the beginning a flat rectangular piece twice as large as the projected bottom of the basket. Then the four edges of this rectangle are folded upward, in this

/63 cont./

Ce 285 way serving as parts of the walls of the basket, the latter then being completed by plaiting the free ends of the strips with one another. By this device they manage to obtain a sufficient number of strips to form the walls of the basket. The Chiriguano and Chané of today are ignorant of this device and therefore they cannot make exact baskets of this kind. We do not know whether they gradually forgot the devices of their primordial plaiting technique under the influence of imported crafts or through the introduction of new ideas, or whether they may have imitated forms of baskets which they saw among other tribes of Indians without knowing the devices of the technique.

Ce 285 177 178

The bottoms and thus the rudiments of the two baskets I. A. 678 and 725a, shown in Figures 86a and 98b, are formed in a manner completely different from the bottoms of the two baskets described above. In making these baskets the Indians have availed themselves of the experience which they have had in the manufacture of the modern hat described above. Beginning the plaiting of these two baskets in the center of the bottom exactly corresponds to the beginning of making the hat, outside of the fact that the strips of the baskets, consisting of caranday palm leaflets, are wider and therefore the mesh is much larger. Where the side walls of the basket begin and more strips are needed than for the bottom, other strips are added, but, in contrast to the manufacture of the hat, by means of a kind of plaiting that joins the free ends of the original strips with the additional strips so that all together they are used to weave the sides of the basket. Also, the analogous baskets of the Chiriguano of the Caipipendi valley described and shown in drawings by Métraux seem to be strongly influenced by modern techniques (266).

266. Métraux. I, pp. 454-457. Plates 58-61.

Ce 285 One type completely different from the baskets described above is shown in the Izozó baskets I. A. 679-686. The plaiting of these does not begin at the bottom like the plaiting of the other baskets, but at the upper edge, and it ends with the making of the bottom. I have minutely described this type of

/65 cont./

415 Wooden Hoops for Storing Possessions, in the Collection

[126] I. A. 580. A pair of hoops (Chiriguano). Diameter 53 cm.
I. A. 581. " " " " " " 51 cm.
I. A. 582. " " " " " " 46 cm.
I. A. 583. " " " " " " 43 cm. (Fig. 41).
I. A. 584. One hoop " " 48 cm.

In the Chiriguano houses in Macharete I found hanging wooden hoops, which, usually in pairs, served for storing various
• [285] possessions of the Indians. The circular area of the hoops is filled in with strips of cane that are stretched across the hoop and interwoven as Figure 41 shows. The hoops are provided with strings or strips of leather in order to be hung in the houses (268).

268. See Métraux I, p. 471, Figs. 126 and 127.

285 126 Modern Plaited Objects in the Collection

I. A. 503. Basket (Chiriguano). Diam. 18 cm. Height 12.5 cm.
I. A. 550. " " " 27 cm. " 13 cm.
I. A. 552. " " " 31 cm. " 23 cm.
I. A. 553 Flat basket " " 56 cm. " 16 cm.

/66/ I obtained from the Chiriguano some baskets whose technique is completely different from the technique of the
[171] baskets described above. They are so similar to the baskets commonly used by the Paraguayans that we must consider them products of an absolutely modern craft, and it is not necessary
285 for us to deal with their technique. Nordenskiöld and Métraux show in sketches and describe such baskets of the Chiriguano, among which some have handles and others lids (269).

269. Nord. 2, p. 171 and Figs. 53 and 51. Métraux I, pp. 444-453, Plates 73-77.